

SUPPORT FOR THE AMENDMENT

This Amendment rewrites Claims 35 in independent form. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 1-2, 4-17, 20-24 and 33-35 will be pending in this application. Claims 1 and 35 are independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

Applicants thank the Examiner for the indication in the Office Action at page 5, lines 4-5, that "Claim 35 is objected for depending from a rejected base claim, but would otherwise be allowable if rewritten into the independent claim 1". Claim 35 is rewritten in independent form. Thus, independent Claim 35 is allowable.

The present invention provides a process for mask-free localized grafting of organic molecules on a composite surface. The composite surface presents conductive or semiconductive portions and consists of a paving of different materials. Specification at page 6, lines 23-24.

Claims 1-2, 4-17, 20-24 and 34 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 4,269,682 ("Yano") in view of U.S. Patent No. 5,350,323 ("Boissel") and *Journal of Electroanalytical Chemistry*, 465: 200-208 (1999) ("Charlier"), as evidenced by U.S. Patent No. 5,168,321 ("Gregory").

Yano discloses a system for measuring chemical properties of a substance in an electrolyte. The system disclosed in Yano comprises a measuring unit with a reference electrode comprising an insulated gate field effect transistor (FET) whose gate region is

overlaid with a polymeric membrane and a pseudo reference electrode. Yano at column 3, lines 34-39.

The surface implemented in Boissel is made of either a cuprous base metal (column 1, lines 47-51) or a metal layer coating said base metal (column 1, lines 43-46 and lines 52-57). The polymer film disclosed in Boissel is deposited on the surface by electropolymerization and under cathodic polymerization, as indicated at step (a) of the process. Boissel at column 2, lines 5-7. Thus, Boissel's polymer film is deposited and not electrografted.

Contrary to the Office Action at page 4, lines 6-8, Applicants have not suggested that Charlier discloses depositing instead of electrografting.

Charlier discloses electropolymerization as probed by an electrochemical quartz crystal microbalance (EQCM). Charlier at title. The EQCM is a quartz crystal coated with Pt deposited over a Ti adhesion layer as disclosed at page 201, right column, last paragraph.

Yano discloses electrodes which are electrodes for analytical measurements and reference electrodes. These electrodes work with infinitesimal currents.

The most compelling proof of these infinitesimal currents is that each of the structures disclosed in Yano's figures comprises two electrically-insulating superimposed layers at least on the face in contact with the solutions to be studied. These superimposed layers correspond to SiO₂ and Si₃N₄. See FIG. 1B: layers 7 and 8; FIG. 3: layers 23 and 24.

One skilled in the art (an electrochemist) would not have chosen this kind of electrodes to implement electrografting.

Indeed, electrografting means "current" and thus very weak resistance. On the contrary, the electrodes disclosed by Yano are very resistive, which is normal since they are used for analytical measurements.

More particularly, the electrodes disclosed by Yano are precisely supposed to undergo no electrodeposition-type modification during the analysis in order to give a reproducible measurement signal.

Thus, the proposed combination of references cannot render the present invention obvious.

Because the cited prior art fails to suggest the independent Claim 1 limitations of a "process for mask-free localized grafting of organic molecules ... onto a composite surface comprising conductive and/or semiconductive areas that are materials of different nature, the process comprising placing said organic molecules in contact with said composite surface; and electrochemically grafting an insulating film of said organic molecules on chosen, defined areas of said conductive and/or semiconductive areas by bringing said chosen, defined areas to a potential ...", the rejection under 35 U.S.C. § 103(a) should be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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